

PULSED EDDY CURRENT SENSOR PROBES AND
INSPECTION METHODS

ABSTRACT OF THE DISCLOSURE

[0048] A pulsed eddy current sensor probe includes a sensor array board. A number of sensors are arranged on the sensor array board and are operable to sense and generate output signals from the transient electromagnetic flux in a part being inspected. Each of the sensors has a differential output with a positive and a negative output. At least one drive coil is disposed adjacent to the sensors and is operable to transmit transient electromagnetic flux into the part. A first and a second multiplexer are arranged on the sensor array board and are operable to switch between the sensors. The first and second multiplexers are connected to the positive and negative outputs of the sensors, respectively.